

Problem Statement-1

```
package datastructures;
import java.util.Scanner;
public class LinearSearch {
    public static void main(String[] args){
        int[] arr = {10,20,30,40,50};
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the element to be searched");
        int searchValue = sc.nextInt();
        int result = (int) linearing(arr,searchValue);
        if(result==-1){
            System.out.println("Element not in the array");
        } else {
            System.out.println("Element found at "+result+" and the search
key is "+arr[result]);
        }
    }
    public static int linearing(int arr[], int x) {
        int arrlength = arr.length;
        for (int i = 0; i < arrlength; i++) {
            if (arr[i] == x) {
                return i;
            }
        }
        return -1;
    }
}
```

BinarySearch.java Bubblesort.java ExpSearch.java InsertionSort.java LinearSearch.java × MergeSort.java

```
1 package datastructures;
2
3 import java.util.Scanner;
4
5 public class LinearSearch {
6
7     public static void main(String[] args){
8
9         int[] arr = {10,20,30,40,50};
10
11         Scanner sc = new Scanner(System.in);
12         System.out.println("Enter the element to be searched");
13         int searchValue = sc.nextInt();
14         int result = (int) linearing(arr,searchValue);
15
16         if(result!=-1){
17
18             System.out.println("Element not in the array");
19         } else {
20
21             System.out.println("Element found at "+result+" and the search key is ");
22         }
23     }
24     public static int linearing(int arr[], int x) {
25
26         int arrlength = arr.length;
27         for (int i = 0; i < arrlength; i++) {
```

Problems @ Javadoc Declaration Console ×

<terminated> LinearSearch [Java Application] C:\Users\Swaroop\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64

Enter the element to be searched

50

Element found at 4 and the search key is 50